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## REPORT ON A VISIT TO DIRK HARTOG ISLAND, AUGUST-SEPTEMBER 1973, WITH SOME OBSERVATIONS ON THE FAUNA AND FLORA

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### INTRODUCTION

Our visit to Dirk Hartog Island arose from a growing interest in the photography of the various Australian wren species. Since there had been little, if any, close up photography of the Pied Wren (*Malurus leucopterus*) which occurs only on Dirk Hartog and Barrow Islands, we chose this species as our special target for 1973.

### WORKING AREA

It was initially decided to camp, and work, in the Quoin Bluff South area, thus gaining some benefit from observations made by R.A.O.U. members during their visit to Peron Peninsula in August-September 1972. (N.B. a closely similarly-named feature, Quoin Bluff North, is situated on Dorre Island, to N.E. of Dirk Hartog Island).

We were therefore fortunate in being able to establish our base at the Herald Bay Outcamp, situated midway between the Station homestead to the south and Sandy Point to the north, a total distance of about 35 kilometres, with Quoin Bluff as its focal point. The greater portion of our time was devoted to this area on the east coast, which includes mainly sandy country, with dense thickets of low scrub dominated by *Acacia*, *Diplolaena* and spinifex. In the vicinity of the Ten Mile Well, the vegetation is more open on flat ground. On the land rising to Quoin Bluff, ground cover consists almost entirely of dense low heath of *Thyryptomena* with some *Plectrachne* (one of the species of spinifex common at Dirk Hartog Island).

F. Lawson Whitlock apparently searched this same general area on foot in 1920. When referring to the Australian Bustard, he wrote ". . . I seldom walked from my camp to the homestead (10 miles!) without seeing a young male bird . . ." We felt that today's observer in this kind of terrain, could well be handicapped by the four-wheel-drive vehicle, which may explain perhaps, to some extent, the non-appearance or non-observance in 1973, of some species so well described by this ornithologist over 50 years previously.

### FLORA

Wildflowers appeared to be plentiful after a better than average winter rainfall. The following species were in flower and were photographed:

- Abutilon oxycarpum* F. Muell.
- Brachycome latisquamea* F. Muell.
- Brachycome iberifolia* Benth.
- Calythrix strigosa* A. Cunn.
- Diplolaena grandiflora* Desf.
- Erenophila glabra* (R.Br.) Ostf.
- Halgania littoralis* Gardn.
- Jasminum calcareum* F. Muell.

*Pileanthus linacis* Labill.  
*Pittosporum phillyraeoides* DC.  
*Pityrodia atriplicina* (F. Muell) F. Muell. ex Benth.  
*Thyryptomena baekaeacea* F. Muell.  
*Westringia rigida* R.Br.

#### MAMMALS

No feral cats were encountered although on one occasion fresh paw marks were found on recent tyre tracks some 14 kilometres from the homestead. No wild goats were seen, either during a day visit to the West Coast Mill where they were said to occur, or during a 2-day visit to Cape Inscription. No marsupials were observed; some limestone caves on the east coast were searched for skeletal remains—without success.

Trapping, with small "Elliot" folding live traps, was carried out on behalf of the Fauna Research Branch of the Fisheries and Fauna Department, in six localities in the main working area—360 trap-nights yielded two specimens of the Sandy Island Mouse (*Pseudomys hermannsburgensis*).

#### REPTILES

The following reptiles were collected:

*Heteronota bynoei* (Bynoe's Gecko).  
*Diplodactylus spinigerus* (Soft-spined Gecko).  
*Lerista praepectata* (a burrowing skink).  
*Demansia psammiphis reticulata* (Coppertail).  
*Vernicella bertholdi littoralis* (Bandy Bandy).  
(Specimens registered W.A. Museum R44234-239).

There were also seen:

*Psendeelis australis* (Mulga Snake).  
*Nephrurus laevis occidentalis* (Knobtailed Gecko).  
*Amphibolurus reticulatus* (Netted Dragon).

#### BIRDS

Continuing unsettled weather with light rains extending even into the first week of September, and the early onset of the well known seasonal winds of Shark Bay ("southerly busters") considerably inhibited our prospects of photographing the wren species, even with specialised stalking equipment. Persistent winds confined these small birds to the undergrowth, and no evidence of nesting was observed until almost the last week of our stay.

It was significant that on one of the few warm windless days (September 5) B. A. W. found several nests of the Pied Wren and also parties of Emu Wrens with newly fledged young. This was due to her methodical searching of the sloping ground behind Quoin Bluff where she had established definite territories of at least four pairs. On the next day, when the winds returned, it became necessary to create "natural" windbreaks in order to obtain reasonable conditions for close-up photography of these two species.

In the following notes, all sightings were made and confirmed by both of us—unless otherwise stated. Several species of sea birds and waders were not identified.

**Wedge-tailed Shearwater.**—On the return journey to the mainland (15 September) in rough sea about 8 kilometres from Dirk Hartog Island, we ran close to a flock of about 100 birds—some resting on the water and others flying often very close to the waves. They were all of entirely dark coloration.

**Pelican.**—Frequently in groups of up to 15 on various sandy strips exposed by the tide.

**Pied Cormorant.**—Actively nesting in the large colony at Quoin Bluff containing an estimated 3,000 plus birds. A "raft" of some hundreds was seen on one occasion about 1 kilometre from the colony.

**Reef Heron.**—One or two birds often seen near each rocky point or reef. All were in the grey phase.

**Wedge-tailed Eagle.**—One bird seemed to inhabit the area of Ten Mile

Well. According to local information, numbers of these birds have been found after drowning in open tanks at various well sites. The lessee is concerned with this problem and is taking action to protect the species.

**Australian Little Eagle.**—Apparently not previously recorded on Dirk Hartog Island. We saw one bird, at a distance of 50 metres, standing on its prey (a skink) below the cliffs at Cape Inscription on September 3. Its size, coloration, feathered tarsi, and characteristic profile, left no doubt as to its identity.

**White-breasted Sea-Eagle.**—The old nest under the cliff at Quoin Bluff, contained two well advanced chicks on August 14. One appeared to be suffering irritation at the vent—it was found next day riddled with brown maggots similar to those infesting dead carrion brought to the nest. On one occasion, a live Pied Cormorant juvenile was seen carried to the nest from the colony below and fed to the juvenile. Pieces of fresh green foliage were also brought to the nest and changed daily. Predation on waders on the beach, south of the bluff was observed. One parent disappeared about the end of August. Some days later a recently drowned Sea-Eagle was extracted by station staff from an open tank at Ten Mile Well. Sea-Eagles appeared to be also inhabiting most of the main headlands on the east coast. On August 14, six birds were seen on the wing together high over Quoin Bluff.

**Osprey.**—Frequenting most rocky headlands—sometimes in spectacular aerial combat with Sea-Eagles. Old but active nests with eggs were found at four points including one just below the historic posts of Cape Inscription. An old nest on a low "grape" bush on the beach south of Quoin Bluff was occupied at times by two birds simultaneously, but no eggs were laid during the five weeks of our observation. At other times one bird was always close by—seemingly protecting its claim to this nest.

**Nankeen Kestrel.**—Apparently common throughout the island. Nesting in cliffs on the coast, and in old Little Crows' nests inland. On August 19 a Little Crow's nest in the Garden windmill contained 5 Kestrel eggs. On 30 August these had been replaced by one egg of a Little Crow. Another Little Crow's nest in the small mangrove at the neck of Tetraddon Loop contained 5 well advanced Kestrel chicks on September 13.

**Australian Bustard.**—A party of 5 birds was often seen in our main area. A Bustard with one juvenile about one month old appeared on the track to the West Coast Mill on August 25. According to local information the bird is common on the island.

**Pied Oystercatcher and Black Oystercatcher.**—Both species frequently seen, either in mixed groups or singly. A nest of a Pied Oystercatcher contained 2 eggs on 15 August, and was vacated by September 2; 2 fledglings were on Sandy Point on 13 September. No nests of the Black Oystercatcher were found.

**Banded Plover.**—Inhabiting the open flat areas. One pair with three juveniles at the Ten Mile Well.

**Red-capped Dotterel.**—Several pairs feeding on edge of tidal salt pan south of Cape Inscription on 4 September.

**Australian Dotterel.**—One bird with two juveniles seen south of Quoin Bluff on 9 September.

**Grey Plover.**—Various sightings on beaches near Quoin Bluff. A flock was seen on the homestead beach on 14 September.

**Turnstone.**—Flock of eight on beach south of Quoin Bluff on 17 August.

**Eastern Curlew.**—Single birds seen on several occasions wading in shallows at low tide south of Quoin Bluff. A group of seven seen on 30 August.

**Common Sandpiper.**—One bird on beach 2 kilometres south of Quoin Bluff on 13 September.

**Bar-tailed Godwit.**—Flock of up to 10 birds at various times north and south of Quoin Bluff. A flock of 40 birds appeared at Tetraddon Loop on 30 August.

**White-headed Stilt.**—Two adults with three immatures on water-covered saline flat close to beach north of Sandy Point on 4 September.

**Southern Stone Curlew.**—Frequently heard calling at night from the dense scrubland behind Herald Bay. A. G. W. flushed one bird during the day on 29 August.

**Pacific Gull.**—Occasional pairs sighted. One pair was seen with an immature bird, on the wing, over Quoin Bluff on 23 August.

**Silver Gull.**—Nesting in several places but more numerous at Quoin Bluff in association with the Pied Cormorant colony, where juveniles were seen at various stages. Predation on the Pied Cormorant nests was observed.

**Caspian Tern and Crested Tern.**—Both seen occasionally in small numbers. A large flock of about 200 of these two species was resting north of Sandy Point on 2 September. We did not see any nesting.

**Common Bronzewing.**—Two flushed by B. A. W. from acacia scrub at Herald Bay.

**Domestic Pigeon.**—One bird appeared daily on the main track near Ten Mile Well. It disappeared after a few weeks and was later recovered by station staff from a nearby well where it had recently drowned. It was noted there was water available in adjacent sheep troughs. The bird bore a leg band ND/PC 72 1039. This was later identified by the Southern Suburbs Pigeon Racing Club as belonging to one of a number of birds released on 4 August 1973 at Carnarvon in a normal Club race to Perth. It had been recorded that strong easterly winds caused a number of the birds to be lost or delayed.

**Welcome Swallow.**—Common. One pair nesting under our roof in the outcamp.

**Australian Pipit.**—Common. Nesting throughout August.

**Pied Wren.**—Fairly common over the whole area. No difficulty was experienced in "calling up" females, but males invariably fled with low flights of increasing distance, assisted by the persistent wind. The spectacular male thus had no difficulty in keeping out of camera range, and many hours were lost in unsuccessful pursuit. Whereas Whitlock found the Variegated Wren to be extremely shy and not so abundant as the Pied Wren, our experience differed.

Nesting at Quoin Bluff appeared to have taken place several weeks later than that in the northern part of the island where Pied Wrens inhabit the dense low Melaleuca heath. According to local information the winter rainfall was much heavier in the north. Nests found by B. A. W. in Quoin Bluff area were not more than half a metre from the ground, two in *Thryptomene* and one in saltbush, the latter being fairly easily seen.

**Variegated Wren.**—Common in our area and appearing to be more abundant than the Pied Wren. Fledglings were seen early in September. One nest with juveniles was found deep in a dense spreading *Acacia*—another was situated in a small open saltbush. We frequently noted females of this species attempted to draw us away from the nesting area by simulated "feeding chick" noises. This was not observed with other species of wrens.

**Southern Emu-Wren.**—Parties were seen on several occasions in low *Thryptomene* heath on Quoin Bluff, where *Plectrachne* also occurs. On 27 August at Herald Bay one pair was flushed from a dense *Acacia-Diplolaena-Triodia* thicket. Their behaviour ("rodent run" and broken wing displays) indicated nesting but a careful search failed to find the nest or fledglings. Fledglings were seen during the second week in September in Quoin Bluff area. On 14 August at Quoin Bluff, A. G. W. saw a male Emu-Wren with a clearly defined rufous crown. It differed markedly in this respect from other male Emu-Wrens of the same locality.

**Spotted Scrub-Wren.**—Common.

**Western Grass-Wren.**—We were not successful in making a positive identification.

**Field Wren.**—Seen at various times in vicinity of Quoin Bluff. One bird appeared to be nesting (carrying food) on 9 September.

**Red-capped Robin.**—On 3 September B. A. W. saw a male Red-capped

Robin on a ridge in the Cape Inscription reserve, where the tallest vegetation was an *Acacia* species.

**Crested Bellbird.**—Frequently heard calling from various points in the dense scrubland. We were not successful in our search for the bird.

**Western Silvereye.**—Common in the *Acacia* scrubland.

**Singing Honeyeater.**—Perhaps the most common bird seen.

**Zebra Finch.**—Seen in two localities. One pair was apparently nesting in the lower part of an old Little Crow's nest in a mangrove tree at Tetraddon Loop. Another pair was seen near a mustering paddock in the Sandy Point area.

**Black-faced Wood-Swallow.**—Parties of these birds were at various places.

**Grey Butcher-bird.**—Nearly all pairs were nesting. They were not aggressive like the birds in the Perth suburbs.

**Little Crow.**—Common. Nesting during August-September usually in the tallest trees and on windmills. One nest was built and occupied on the daylight sensor which activates the Cape Inscription lighthouse. At South Passage Mill 4 eggs were in a nest built in a clump of spinifex at the base of a windmill.

#### ACKNOWLEDGEMENTS

We were most appreciative of the advice given by Dr. D. L. Serventy—copies of valuable ornithological papers in his possession were of great material help to our project.

The Trustees of the National Photographic Index of Australian Birds, Australian Museum, Sydney, gave assistance under the Bank of New South Wales Grants Scheme.

Sea and land transport, with accommodation on the island, were kindly provided by Sir Thomas Wardle, lessee of Dirk Hartog Island. Sir Thomas's personal interest made our expedition far more comfortable and flexible than our own plan would have allowed.

Notes on the R.A.O.U. observations in 1972 were supplied by Mr. G. C. Chapman, of Glen Forrest.

We were also equipped with a most useful summary of observations made by various ornithologists during the years 1917-1972, and compiled by Dr. S. J. F. Davies, C.S.I.R.O., Division of Wildlife Research.

A copy of F. Lawson Whitlock's "Notes on Dirk Hartog Island and Peron Peninsula, Shark Bay, Western Australia", *The Emu*, vol. XX, 1921, was kindly supplied by Dr. Serventy. This was fortuitous, since our base was only 3 kilometres from the Ten Mile Well, where Whitlock was encamped during the period June-September 1920. We were thus able to more appreciate his comments when working in the exact localities about which he wrote.

We were also able to refer to personal notes loaned by Dr. A. A. Burbidge, Fauna Research Branch, Department of Fisheries and Fauna, relating to his visit (with A. S. George and T. Evans) during September 1972.

Mr. George identified the flora mentioned in our report.

#### PERSONAL COMMENT

We were most favourably impressed with the intention, expressed by Sir Thomas Wardle, to maintain the essential nature of Dirk Hartog Island, and to avoid this being endangered by unrestricted tourism and by other pressures.

As non-professional naturalists, we saw and appreciated much on the island of great interest, in the few sections of natural history with which we are familiar.

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